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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/533,156      | 12/15/2005  | Laurent Demja        | 979-139             | 5189             |

39600 7590 10/17/2006  
SOFER & HAROUN LLP.  
317 MADISON AVENUE, SUITE 910  
NEW YORK, NY 10017

EXAMINER

ELLIS, SUEZU Y

ART UNIT PAPER NUMBER

2878

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |              |  |
|------------------------------|-----------------|--------------|--|
| <b>Office Action Summary</b> | Application No. | Applicant(s) |  |
|                              | 10/533,156      | DEMJA ET AL. |  |
|                              | Examiner        | Art Unit     |  |
|                              | Suezu Ellis     | 2878         |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/26/05</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on April 26, 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because most of the abstract appears to have been taken from claim language of claim 1. Lines 1-4 are not formed

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to be a complete sentence. Line 7 recites "said optical elements comprise", which is considered legal phraseology. Further in line 1, the abstract recites "an optical detection device for a counter, comprising...". The verb "comprise" is considered as legal phraseology and should be avoided. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities:

Page 2, lines 11-12 recite "at least three sectors having a centre angle of 120°". If there is more than three sectors, it is unclear how the center angle can still be 120°. As understood, a center angle is calculated as 360° divided by the number of sectors. Therefore, the center angle cannot be 120° when there are more than three sectors. This phrase needs to be rewritten.

Page 3, line 33, page 4, line 5, page 7, line 8, recite the term "totallizer". This word is incorrectly spelled. Spelling should be --totalizer--.

Appropriate correction is required.

### ***Claim Objections***

Claims 6 and 7 are objected to because of the following informalities:

Claims 6 and 7 appear to be pseudo-independent claims. The preambles of dependent claims should be consistent with the preamble of the claims from which they depend. To overcome this objection, limitations of the independent claim need to be incorporated into the dependent claims.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, claim language recites "at least three sectors having a centre angle of 120°". If there is more than three sectors, it is unclear how the center angle can still be 120°. A center angle is calculated as 360° divided by the number of sectors. Therefore, the center angle cannot be 120° when there are more than three sectors. This needs to be reworded.

Claim language in claim 1 recites "a so-called active sector". What does applicant mean by "a so-called active sector"? Please clarify.

Claim language recites "a receiving element receiving a reflected light beam", however fails to indicate where the light is reflected from. Further, it is unclear if the receiving element is the same as that mentioned in line 2. Please clarify.

Claim language in claim 1 recites "optical elements of emitting type and receiving type opposite said disc". This wording is awkward. It is unclear what applicant means by the elements being opposite the disc. Are the elements on one side of a disc or they are on opposite sides of the disc. Please clarify.

Claims not specifically addressed are indefinite due to their dependency.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made:

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pokorski et al. (US 4,947,036) in view of Schweizer et al. (US 5,087,811). Hereinafter, Pokorski et al. and Schweizer et al. will be referred to as Pokorski and Schweizer, respectively.

With respect to claims 1, 2 and 5-7, Pokorski discloses in Figs. 4 and 12, an optical detector device that includes a rotating disc (58) with two sectors (59, 60), an emitter (26) and a receiver (32) that receives light reflected from the rotating disc. Pokorski further discloses the rotary disc is coated with two different colored filters (red and green) and the emitter is a dual-color emitter that alternately emits light of two wavelengths such as red and green (col. 5, line 66 – col. 6, line 4). Pokorski discloses counting the color changes in a given period of time by the signal processor, which is considered to be equivalent to determining the number of rotations of the disc (col. 12, lines 56-62). Pokorski further discloses the optical detector device can be used as a flow meter. Pokorski discloses the rotary disc can have more than two colored zones,

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however fails to expressly disclose the disc includes three sectors with a center angle of  $120^\circ$ . Pokorski and Schweizer are directed to a similar field of endeavor of fiber optic sensors. Schweizer discloses in Fig. 7, an angle or position measuring device using a color filter wheel that has three different color sectors with a center angle of  $120^\circ$  (col. 11, lines 3-20). It would have been obvious to a person of ordinary skill in the art to modify the rotating disc of Pokorski to have three different colored sectors with a center angle of  $120^\circ$  in order to increase sensitivity of the meter (col. 13, lines 15-17).

With respect to claim 3, the modified Pokorski fails to expressly disclose positioning the optical elements in such a manner that the angle of incidence of the optical beam emitted and received by the optical elements is less than  $60^\circ$ . Nevertheless, it would have been obvious to one of ordinary skill in the art to modify the angle of incidents of the optical beam emitted since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pokorski in view of Schweizer and further in view of the teachings of Roll (US 3,986,777).

With respect to claims 4 and 8, the modified Pokorski fails to expressly disclose the optical detection device including a collimator. Schweizer discloses using a collimating element with the light emitting end of the optical fiber. It would have been

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obvious to a person of ordinary skill in the art to use a collimator in order to create a circular cross-section for maximum sensitivity, as taught by Roll (col.4, lines 60-64).

***Telephone/Fax Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suez Ellis whose telephone number is (571) 272-2868. The examiner can normally be reached on 8:30am-5pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Stephone B. Allen  
Primary Examiner